98TH CONGRESS
2d Session
HOUSE OF REPRESENTATIVES
REPORT
98-926

# TRUCK SAFETY ACT OF 1984

AUGUST 1, 1984.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. HOWARD, from the Committee on Public Works and Transportation, submitted the following

## REPORT

[To accompany H.R. 5568]

[Including cost estimate of the Congressional Budget Office]

The Committee on Public Works and Transportation, to whom was referred the bill (H.R. 5568) to provide that the Secretary of Transportation may exempt segments of the Interstate System from the requirement that double trailer trucks be allowed to operate on all interstate highways and from certain truck length and width limitations, and for other purposes, having considered the same, report favorably thereon without amendment and recommend that the bill do pass.

The reported bill provides a mechanism that enables the Secretary of Transportation to exempt segments of the National System of Interstate and Defense Highways (Interstate System) from subsections 411 (a) and (c) and 416(a) of the Surface Transportation Assistance Act of 1982 (STAA). Those subsections essentially mandate the use of longer and wider vehicles and combinations on the Interstate System. This bill simply would enable the Secretary to exempt a segment of the Interstate System from the mandate where such segment is not capable of safely handling the longer and wider vehicles, and combinations. The mechanism can be initiated by the Secretary or by the governor of a State.

The Surface Transportation Assistance Act of 1982 established mandatory length requirements for trucks operating on the Interstate System and those segments of the Federal-aid primary system highways as designated by the Secretary of Transportation (Secretary). A nationwide width standard of 102 inches was established as part of the fiscal year 1983 Department of Transportation (DOT) Appropriations Act (Public Law 97-369) and was amended early in 1983 (Public Law 98-17) to establish uniform effective dates for the lengths and width provisions. The width standards apply to the Interstate

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System and those segments of the Federal-aid system designated by the Secretary, with traffic lanes designed to be a width of 12 feet or more. The width requirements are set forth in section 416 of the STAA, and the length and combination requirements are set forth in section 411 of the STAA.

Originally, it was contemplated that the entire Interstate System could accommodate the new vehicle sizes and combinations authorized by the STAA, as amended. By law, the entire system is available for the longer, wider, and combination vehicles as authorized by the STAA. One recognized exception is that those routes on which all trucks were banned prior to enactment of the STAA are not now available for use by the longer and wider vehicles. This exception encompasses only about 20 miles of the Interstate System.

Recently, a number of States have expressed concern about the safety of using some segments of the Interstate System for the operation of vehicles having the length and width authorized by the STAA. Most of these segments in question were built before the inception of the interstate program and were incorporated into the system without full upgrading to Interstate standards. As a result, some of these segments may not meet all of the interstate standards with respect to factors such as length of acceleration and deceleration lanes, the geometrics of the interchanges, vertical clearance, width of shoulders, and horizontal and vertical alignment. Moreover, according to the Department of Transportation, about 67 miles of the Interstate System do not have highway lanes that are 12 feet wide.

It is the Department's position, that except for the exception mentioned above, it does not have the authority to recognize outright exemptions of segments of the Interstate System from the national network of highways available to the vehicles authorized to use the Interstate System by the STAA. This position is supported by others.

In a letter to Chairman James J. Howard on H.R. 5568, the Department of Transportation stated that the bill:

> * * * would provide the Secretary with the authority to exempt segments of the Interstate System from the current limitation on State regulation of tandem configuration, vehicle lengths and vehicle width. Under current law, every interstate route is available to 102-inch wide trucks and to trucks in a tandem configuration. The DOT does not have the authority to create an outright exemption for any interstate segment, but we do permit States to impose reasonable restrictions, such as lane and peak hour restrictions, when they are necessary to accommodate special physical or operating problems. The bills would broaden DOT's authority and make the job easier.

Plainly, this lack of authority for the Department of Transportation is not consistent with the committees concern for public safety. Hence, the committee strongly believes that the Department must have clear authority to address safety problems that may result from use of segments of the Interstate System by vehicles having the lengths, widths, and configurations authorized by the STAA. H.R. 5568 confers that clear authority upon the Department.

Although the reported bill does not contain any specific procedures for the exemption process at the Department level, the committee believes that decisions regarding the determinations of whether or not to grant an exemption can and should only be made after affording the public and interested parties notice and an opportunity to comment pursuant to appropriate rulemaking procedures under the Administrative Procedure Act.

Moreover, the time allotted for these procedures is 120 days from the date the Governor submits complete documentation for the exemption or from when the Secretary initiates the process on his or her own initiative. The time limitation of 120 days applies to the entire process provided for the Department's disposal of the request after receiving the required documentation including the consultation process concerning the alternate route question.

There is one final factor that should be noted here; that is, the major safety concerns expressed to the committee relate to the use of the longer and wider trucks and their configurations. The amendments to section 416 of the STAA relate to the width of trucks and buses; however, it is the intent of the committee that the exemption process provided for in the bill be exercised in a manner that is fair, in a manner that squarely addresses the concerns regarding trucks that have been brought to the attention of the committee, and in a manner that addresses matters of public safety. Moreover, based on informal discussions with Federal officials, the committee is unaware of any problems related to buses, and, therefore, it would not expect that the provisions of this legislation would be used with respect to buses.

The bottom line of H.R. 5568 is public safety and the committee expects that the Secretary would take whatever action is necessary to protect the safety of the public.

## Section-by-Section Analysis

### SECTION 1

States that this act may be cited as the Truck Safety Act of 1984.

### SECTION 2

Subsection 2(a) amends subsection 411(a) of the Surface Transportation Assistance Act of 1982 (STAA) to conform it to new subsection (i).

Subsection 2(b) amends subsection 411(c) of the STAA to conform it to new subsection (i).

Subsection 2(c) adds a new subsection (i) to section 411 of the STAA. The new subsection consists of three new paragraphs.

Subsection (i)(1) provides that if the Governor of a State, after consultation with units of local government in which any segment of the Interstate System is located, determines that such segment is not capable of safely accommodating motor vehicles having the lengths set forth in subsection (a) or the combinations provided for in subsection (c), the Governor may notify the Secretary of such determination and request that the Secretary exempt such segment from either

or both of the subsections. The Governor shall transmit with such notification specific evidence of safety problems that supports such determination. The Governor shall also consult with the affected units of local government regarding alternate routes that:

(1) can safely accommodate motor vehicles having the lengths set forth in subsection (a) or the combinations set forth in subsection (c); and

(2) that serve the area in which such segment of the Interstate System is located.

The finding of this consultation must be transmitted to the Secretary.

Subsection (i)(2) provides that if the Secretary determines either upon the request of a Governor, or upon his or her own initiative, that any segment of the Interstate System is not capable of safely accommodating motor vehicles having the lengths set forth in subsection (a) or the combinations set forth in subsection (c), the Secretary shall exempt such segment from either or both of such subsections. The Secretary has 120 days to complete any consideration initiated under this subsection. Any exemption granted under this paragraph before the date upon which final rules are issued under subsection (e) shall be included in the final rules. Any exemption granted later than the date final rules are issued shall be published as a revision of such rules.

Subsection (i)(3) provides that if the Secretary exempts any segment of the Interstate System from either subsection (a) or (c) of this section, the Secretary shall consult with the affected units of local government for the purpose of determining any alternative route or routes that can safely accommodate motor vehicles having the lengths set forth in subsection (a) or motor vehicle combinations set forth in subsection (c), and serve the area in which such segment of the Interstate System is located.

Subsection (d) amends section 412 of the STAA to conform it to new subsection 411(i) and subsection 416(e) as redesignated by subsection 2(g) of this bill.

Subsections (e) and (f) are amendments to subsections (a) and (d) of section 416 of the STAA that conform them to new subsection 416(e).

Subsection (g) adds a new subsection (e) to section 416 of the STAA. Subsection (g) consists of three new paragraphs.

Subsection (e)(1) provides that if the Governor of a State, after consultation with units of local government in which any segment of the Interstate System is located, determines that such segment is not capable of safely accommodating motor vehicles having the widths set forth in subsection (a) the Governor may notify the Secretary of such determination and request that the Secretary exempt such segment from such subsection for the purpose of allowing the State to impose a vehicle width limitation of less than 102 inches on such segment. The Governor shall transmit with such notification specific evidence of safety problems that supports such determination. The Governor shall also consult with the affected units of local government regarding alternate routes that:

(1) can safely accommodate motor vehicles having the widths set forth in subsection (a); and

(2) that serve the area in which such segment of the Interstate System is located.

The finding of this consultation must be transmitted to the Secretary.

Subsection (e) (2) provides that if the Secretary determines either upon the request of a Governor, or upon his or her own initiative, that any segment of the Interstate system is not capable of safely accommodating motor vehicles having the width set forth in subsection (a) the Secretary shall exempt such segment from such subsection for the purpose of allowing the state to impose a vehicle width limitation of less than 102 inches on such segments. The Secretary has 120 days to complete any consideration initiated under this subsection.

Subsection (e) (3) provides that if the Secretary exempts any segment of the Interstate System from subsection (a) of this section, the Secretary shall consult with the affected units of local government for the purpose of determining any alternative route or routes that can safely accommodate motor vehicles having the width set forth in subsection (a) and serve the area in which such segment of the Interstate System is located.

## Committee Consideration

H.R. 5568 was introduced on May 2, 1984, and was referred to the Committee on Public Works and Transportation.

The Subcommittee on Surface Transportation conducted hearings on June 14, 15, and 16, 1983, to review the implementation of the Surface Transportation Act of 1982. During the hearing on June 16, 1983, the subcommittee received testimony on the subject matter of this legislation.

On July 31, 1984, the Committee on Public Works and Transportation discharged the Subcommittee on Surface Transportation from further consideration of H.R. 5568 and by voice vote ordered H.R. 5568 to be reported to the House.

## Compliance With Clause 2(l) of Rule XI of the Rules of the House of Representatives

(1) With reference to clause 2(l) (3) (A) of rule XI of the Rules of the House of Representatives, no separate findings or recommendations have been formally issued on the subject matter of this legislation by the Subcommittee on Investigations and Oversight.

(2) Clause 2(l) (3) (B) of rule XI of the Rules of the House of Representatives requires that the report of any committee on a measure which has been approved by the committee shall include the statement required by section 308(a) of the Congressional Budget and Impoundment Control Act of 1974. Since H.R. 5568 does not provide new budget authority or new or increased tax expenditures, compliance with this section is not required.

(3) Clause 2(l) (3) (C) of rule XI of the Rules of the House of Representatives requires that the report of any committee on a measure which has been approved by the committee shall include the statement required by section 403 of the Congressional Budget Act. The

letter submitted by the Director of the Congressional Budget Office under (4) below satisfies this requirement.

(4) The committee has received the following report prepared by the Congressional Budget Office under section 403 of the Congressional Budget Act.

The report is as follows:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
*Washington, DC, August 1, 1984.*

Hon. JAMES J. HOWARD,
*Chairman, Committee on Public Works and Transportation, U.S. House of Representatives, Rayburn House Office Building, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has reviewed H.R. 5568, the Truck Safety Act of 1984, as ordered reported by the House Committee on Public Works and Transportation, July 31, 1984. We expect that enactment of this bill will result in no significant cost to the Federal Government, or to State and local governments.

The Surface Transportation Assistance Act of 1982 prohibited States from enforcing vehicle length and width limitations on the Interstate Highway System below levels specified in the act. H.R. 5568 would authorize the Secretary of Transportation to exempt interstate highway segments from that provision, if a State determines that they are unsafe for larger trucks. The Secretary has 120 days to act on the State's petition. If a route is exempted, the Secretary, in consultation with the affected units of local government, will determine alternate routes that serve the area and can safely accommodate the trucks. This bill also permits the Secretary of Transportation to exempt segments of the Interstate System from the requirement that double trailer trucks be allowed to operate on all interstate highways.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

RUDOLPH G. PENNER.

(5) Pursuant to clause 4(c)(2) of rule X and clause (l)(3)(D) of rule XI of the Rules of the House of Representatives, no oversight findings have been submitted to the Committee by the Committee on Government Operations.

(6) With respect to the requirements of clause 2(l)(4) of rule XI of the Rules of the House of Representatives, the Committee estimates that the enactment of H.R. 5568 should have no significant inflationary impact on prices and costs in the operation of the national economy.

## COST OF LEGISLATION

In accordance with rule XIII(7) of the Rules of the House of Representatives, the cost to the United States in carrying out H.R. 5568, as reported, in fiscal year 1985, and in each of the five following fiscal years, is estimated by the committee to be costs which appear in the report of the Congressional Budget Office.

## VOTE

The committee ordered the bill reported by voice vote.

## CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3 of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

### SURFACE TRANSPORTATION ASSISTANCE ACT OF 1982

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### TITLE IV

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### PART B—COMMERCIAL MOTOR VEHICLE LENGTH AND WIDTH LIMITATION

#### LENGTH LIMITATIONS ON FEDERALLY ASSISTED HIGHWAYS

SEC. 411. (a) No State shall establish, maintain, or enforce any regulation of commerce which imposes a vehicle length limitation of less than forty-eight feet on the length of the semitrailer unit operating in a truck tractorsemitrailer combination, and of less than twenty-eight feet on the length of any semitrailer or trailer operating in a truck tractor-semitrailer-trailer combination, on any segment of the National System of Interstate and Defense Highways (*other than a segment exempted under subsection (i) of this section*) and those classes of qualifying Federal-aid Primary System highways as designated by the [Secretary,] *Secretary of Transportation (hereinafter in this part referred to as the "Secretary")* pursuant to subsection (e) of this section.

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(c) No State shall prohibit commercial motor vehicle combinations consisting of a truck tractor and two trailing units on any segment of the National System of Interstate and Defense Highways (*other than a segment exempted under subsection (i) of this section*), and those classes of qualifying Federal-aid Primary System highways as designated by the Secretary pursuant to subsection (e) of this section.

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*(i) (1) If the Governor of a State, after consultation with units of local government in which any segment of the Interstate System is located, determines that such segment is not capable of safely accommodating motor vehicles having the lengths set forth in subsection (a) or motor vehicle combinations described in subsection (c), the Governor may notify the Secretary of such determination and request that the Secretary exempt such segment from such subsection or from*

*both such subsections. The Governor shall transmit with such notification specific evidence of safety problems that supports such determination. The Governor also shall consult with the affected units of local government regarding any potential alternative route or routes that (A) can safely accommodate motor vehicles having the lengths set forth in subection (a) or motor vehicle combinations described in subsection (c), and (B) that serve the area in which such segment of the Interstate System is located, and shall transmit the findings of such consultation to the Secretary.*

*(2) If the Secretary determines, upon request under paragraph (1) or on the Secretary's own initiative, that any segment of the Interstate System is not capable of safely accommodating motor vehicles having the lengths set forth in subsection (a) or motor vehicle combinations described in subsection (c), the Secretary shall exempt such segment from such subsection or from both such subsections. The Secretary shall make a final determination whether or not to exempt a segment of the Interstate System under this subsection not later than 120 days after the date on which a request is made under paragraph (1) or the Secretary initiates action under this paragraph, as the case may be, with respect to such segment. Any exemption granted by the Secretary under this paragraph before the date on which final rules are issued under subsection (e) shall be included as part of such final rules. Any such exemption granted on or after such date shall be published as a revision of such rules.*

*(3) If the Secretary exempts any segment of the Interstate System from subsection (a) or (c) of this section, the Secretary shall consult with the affected units of local government for the purpose of determining any alternative route or routes that (A) can safely accommodate motor vehicles having the lengths set forth in subsection (a) or motor vehicle combination described in subsection (c), and (B) serve the area in which such segment of the Interstate System is located.*

ACCESS TO THE INTERSTATE SYSTEM

SEC. 412. No State may enact or enforce any law denying reasonable access to commercial motor vehicle subject to this title between (1) the Interstate and Defense Highway System (*other than any segment thereof which is exempted under section 411(i) or 416(e)*) and any other qualifying Federal-aid Primary System highways, as designated by the Secretary, and (2) terminals, facilities for food, fuel, repairs, and rest, and points of loading and unloading for household goods carriers.

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COMMERCIAL MOTOR VEHICLE WIDTH LIMITATION

SEC. 416. (a) No State, other than the State of Hawaii, shall establish, maintain, or enforce any regulation of commerce which imposes a vehicle width limitation of more or less than 102 inches on any segment of the National System of Interstate and Defense Highways (*other than a segment exempted under subsection (e) of this section*), or any other qualifying Federal-aid highway as designated by the Secretary of Transportation, with traffic lanes designed to be a width of twelve feet or more; except that a State may continue to enforce any

regulation of commerce in effect on April 6, 1983, with respect to motor vehicles that exceed 102 inches in width until the date on which such State adopts a regulation of commerce which complies with the provisions of this subsection.

(b) Notwithstanding the provisions of this section or any other provision of law, certain safety devices which the Secretary of Transportation determines are necessary for and efficient operation of motor vehicles shall not be included in the calculation of width.

(c) Notwithstanding the provisions of this section or any other provision of law, a State may grant special use permits to motor vehicles that exceed 102 inches in width.

(d) Notwithstanding any other provision of law and in accordance with the provisions of this section, a State shall have authority to enforce a commercial vehicle width limitation of 102 inches on any segment of the National System of Interstate and Defense Highways (*other than a segment exempted under subsection (e) of this section*), or any other qualifying Federal-aid highway as designated by the Secretary of Transportation, with traffic lanes designed to be a width of twelve feet or more.

*(e) (1) If the Governor of a State, after consultation with units of local government in which any segment of the Interstate System is located, determines that such segment is not capable of safely accommodating motor vehicles having the width set forth in subsection (a), the Governor may notify the Secretary of such determination and request that the Secretary exempt such segment from such subsection for the purpose of allowing the State to impose a vehicle width limitation of less than 102 inches on such segment. The Governor shall transmit with such notification specific evidence of safety problems that supports such determination. The Governor also shall consult with the affected units of local government regarding any potential alternative route or routes that (A) can safely accommodate motor vehicles having the width set forth in subsection (a), and (B) that serve the area in which such segment of the Interstate System is located, and shall transmit the findings of such consultation to the Secretary.*

*(2) If the Secretary determines, upon request under paragraph (1) or upon the Secretarys own initiative, that any segment of the Interstate System is not capable of safely accommodating motor vehicles having the width set forth in subsection (a), the Secretary shall exempt such segment from such subsection for the purpose of allowing the State to impose a vehicle width limitation of less than 102 inches on such segment. The Secretary shall make a final determination whether or not to exempt a segment of the Interstate System under this subsection not later than 120 days after the date on which a request is made under paragraph (1) or the Secretary ini'iates action under this paragraph, as the case may be, with respect to such segment.*

*(3) If the Secretary exempts any segment of the Interstate System from subsection (a) of this section, the Secretary shall consult with the affected units of local government for the purpose of determining any alternative route or routes that (A) can safely accommodate motor vehicles having the width set forth in subsection (a), and (B) serve the area in which such segment of the Interstate System is located.*

[(e)](*f*) The provisions of this section shall take effect on April 6, 1983.

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98TH CONGRESS 2d Session } HOUSE OF REPRESENTATIVES { REPORT 98-938

# LIBRARY OF CONGRESS MASS BOOK DEACIDIFICATION FACILITY

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AUGUST 2, 1984.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

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Mr. HOWARD, from the Committee on Public Works and Transportation, submitted the following

## REPORT

[To accompany H.R. 5607]

[Including cost estimates of the Congressional Budget Office]

The Committee on Public Works and Transportation, to whom was referred the bill (H.R. 5607) to authorize and direct the Librarian of Congress, subject to the supervision and authority of a Federal civilian or military agency, to proceed with the construction of the Library of Congress Mass Book Deacidification Facility, and for other purposes, having considered the same, report favorably thereon without amendment and recommend that the bill do pass.

### BACKGROUND

The Library of Congress, and libraries throughout the world, are facing one of the most pressing problems today, namely, the rapid deterioration of their collections due to the unstable quality of paper produced since around 1850. Paper degradation has been a growing concern of scholars, librarians, and archivists for the last 100 years. It is ironical that the very technology which has enabled inexpensive books to be reproduced in vast numbers carried with it the seeds of its own destruction.

Before the mid 19th century, paper was made from cotton or linen rags, and it could last for hundreds of years. By then, however, the Industrial Revolution and the growing demand for reading matter called for a cheaper and more plentiful source of paper. Technologists discovered their new paper supply in the cellulose fibers from ordinary wood pulp. But untreated pulp-based paper was too absorbent to take a sharp imprint, so chemicals must be added to prevent the ink from running. These chemical additives, especially aluminum sulphate, sooner or later combine with moisture in the paper to form sulphuric acid.

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Thus, any books published since 1850 will be subjected to the acid breaking down the cellulose fibers and pages begin crumbling literally in our hands.

Twelve years ago the Library of Congress' Preservation Research and Testing Office undertook a major program to identify the most universal approach for deacidifying books on a very large scale. This program involved a systematic investigation of all known liquid and gas phase deacidification processes and a study of new possibilities. The liquid phase chemical processes were considered as an approach for large-scale deacidification of book materials. Preservation scientists and conservators were concerned, and are still concerned, with solubility effects observed with non-aqueous and aqueous liquid deacidification systems because they are known to cause transfer of certain inks, dyes, and other soluble materials between pages and between books. The Library of Congress states that in a mass process this problem could lead to very difficult preselection workloads and damage to materials that were not selected out.

After much research and experimentation of vapor-phase deacidification, a process was developed and patented in 1976 by the chemists in the Library of Congress which arrests the degradation of paper and increases the life of books and other library materials by a factor of 2 to 5 times. At present the effective life for acid paper books is thirty to forty years, whereas this new process will extend the life of books in the Library's collections by 400 to 600 years. This process, based on vapor phased impregnation of books and other library materials with diethyl zinc, will neutralize the acidity and leave a residue of zinc carbonate to protect the paper from further acid induced loss of strength. This gaseous process was chosen rather than a liquid process for the following reasons: (1) a gaseous treatment process would minimize the risk of softening and transfer of inks, colored design materials, and other soluble materials from page to page and from one book to another; (2) the relative ease of large-scale batch treatment of millions of volumes and; (3) the high probability of low unit cost and reasonable scale-up costs using known vacuum and chemical process technology.

The diethyl zinc, or DEZ as it is commonly referred to, used in the treatment process is widely used in the chemical industry as a catalyst in the making of polymers. DEZ is a known pyrophoric reagent that is flammable when it is brought into contact with air or water.

The flammable characteristics of DEZ prompted the National Transportation Safety Board to promulgate strict regulations for the handling and transport of the material. These regulations have been adopted and expanded by the Library of Congress to insure proper safeguards are in place when the DEZ is used in the deacidification process.

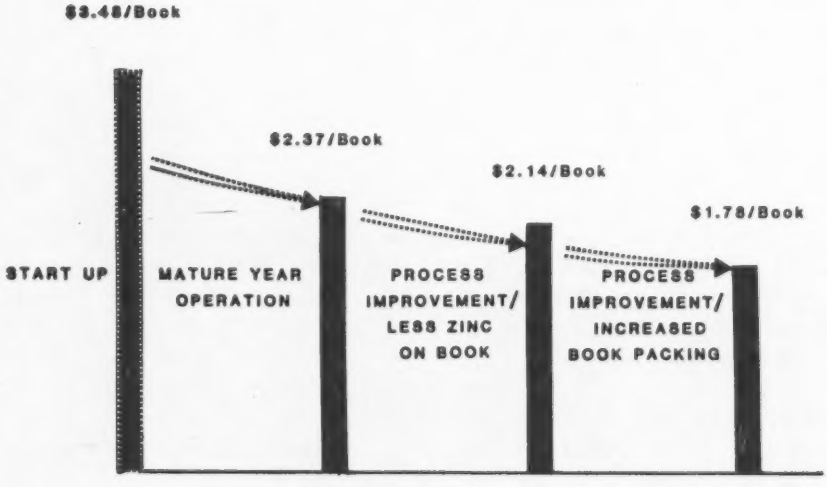
The Library of Congress, in cooperation with NASA and an independent safety consultant, undertook a detailed, step-by-step analysis, of the equipment used in the process to evaluate risks in the engineered design. This analysis resulted in numerous changes in the design to eliminate any potential hazards and these changes will be incorporated into the facility at Fort Detrick. As currently engineered, the Library of Congress states there will be absolutely no safety risks to personnel or books with the Library of Congress process.

Further precautions will also be undertaken by the Library of Congress to minimize any potential problems. Technicians operating the facility will undergo training at the chemical's manufacturing plant and NASA in the handling of the DEZ and operation of the equipment. This additional safeguard is to insure that Library of Congress technicians are knowledgeable of the chemical and the process and are able to competently deal with any problems which might arise.

The Library of Congress has successfully demonstrated that DEZ can be safely used and the element of risk associated with its use substantially minimized if not eliminated. However, the hazards indigenous to DEZ must not be underrated. The Committee would hope that the Library of Congress would not become complacent with the safety achievements they have achieved to date and would continue their research to develop additional innovative methods to eliminate the hazardous risks associated with the use of DEZ.

Invention of this deacidification process by the Library's chemists began with tests in an ordinary pressure cooker in the Library's Preservation Research and Testing Office. Further successful tests with large numbers of book were conducted in facilities of the General Electric Company in Valley Forge, Pennsylvania. In 1982–83, the Library of Congress, in consultation with the National Aeronautics and Space Administration successfully conducted a large scale 5,000 volume test and did smaller scale testing at the 100-volume level in order to refine the process. Using a large NASA vacuum chamber at the Goddard Space Flight Center in Greenbelt, Maryland, originally designed to test satellites destined for outer space, the feasibility of large-scale applications was proven. Information from those trials were used to establish engineering requirements and costs of large-scale treatment. The projected unit cost of the diethyl zinc process will be $3.48 per volume at plant startup and are projected to drop in a two year period to $1.78 per volume with process improvements and higher plant output. These figures include all plant operational costs.

DIETHYL ZINC MASS BOOK DEACIDIFICATION PROCESS

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Recently a careful survey of the Library of Congress' vast collection of approximately 80 million items resulted in data showing 75 percent of these collections would benefit from deacidification treatment. The remaining 25 percent have deteriorated to such an extent that they would only marginally benefit from treatment until transferred to another format such as microform, which in comparison to the new deacidification process is expensive, approximately $30.00 for microfilming each book.

The succeess of the Library and NASA's cannot be underestimated and construction of a permanent book deacidification facility, to extend the useful life of the Library's collection, is warranted at this time.

NEED FOR LEGISLATION

H.R. 5607 authorizes and directs the Library of Congress, subject to the supervision and construction authority of a Federal or civilian agency, to construct a mass book deacidification facility within fifty miles of the United States Capitol at an estimated cost of $11.5 million.

Construction of this facility will allow for the deacidification of approximately 500,000 items of the Library of Congress' vast collection of approximately 80 million items on an annual basis. Currently, over 77,000 books of the Library's collection deteriorate to the extent that they can no longer be used on an annual basis.

The deacidification process developed and patented by the Library of Congress is based on vapor phased impregnation of books and other library materials with diethyl zinc. Books and other materials are loaded into a chamber which is then sealed. Gaseous diethyl zinc is then injected into the chamber. The diethyl zinc will neutralize the acidity in the paper and leave a residue of zinc carbonate to protect the paper from further acid induced loss of strength.

The present proposed facility consists of twin vacuum chambers made in a rectangular shape to accommodate pallets loaded with books. The building includes staging areas for book loading and unloading, a series of rehumidification rooms, and a complete developmental test facility which has its own small DEZ test chamber independent of the production system. In addition, the building includes support facilities for maintenance, storage, offices, heating and air conditioning. It is anticipated the Army Corps of Engineers will construct the facility for the Library of Congress utilizing their authority pursuant to Public Law 89–298.

The capital costs authorized by this legislation include $11.5 million for the construction of a new laboratory building, equipment and related facilities. The Army Corps of Engineers estimates that the building will cost $3.5 million; laboratory facilities and equipment, together with directly related costs will total $8 million. Funds for this activity are included in the Library's fiscal year 1985 budget.

The Library of Congress enlisted the support of the Army Corps of Engineers in locating a suitable federally owned site for the facility. Consideration was given to existing facilities which could be converted for use by the Library of Congress, as well as the construction of a new facility. Based on the findings of the Corps and the Library it was determined that the most cost effective facility would be one constructed at Fort Detrick which is located approximately 50 miles from the United States Capitol. This kind of arrangement is highly

desirable because of the availability of engineering and maintenance services, fire protection and safety services, and security.

Enactment of this bill, together with subsequent appropriations, will enable the Library of Congress to preserve the Liberty's vast collection of books from rapid and total disintegration. It will also make it possible to preserve these books in their natural and original state, that magnificent product of the printer's and publisher's art, the hand held book. This "first of a kind" laboratory facility will be available not only to the Library of Congress but to the library and scholarly community throughout the country, and for that matter, throughout the world. The Librarian of Congress is to be commended for his outstanding leadership in this matter.

### COMPLIANCE WITH CLAUSE 2(l) OF RULE XI OF THE RULES OF THE HOUSE OF REPRESENTATIVES

(1) With reference to clause 2(l)(3)(A) of Rule XI of the Rules of the House of Representatives, no separate hearings were held on the subject matter of this legislation by the Subcommittee on Investigations and Oversight.

(2) With respect to clause 2(l)(3)(B) of Rule XI of the Rules of the House of Representatives, H.R. 5607, as reported, does not provide new budget authority or increased tax expenditures. Accordingly, a statement pursuant to section 308(a) of the Congressional Budget Act is not required.

(3) With reference to clause 2(l)(3)(C) of Rule XI of the Rules of the House of Representatives, the Committee has received a report prepared by the Congressional Budget Office under section 403 of the Congressional Budget Act. The report is as follows:

U.S. SENATE,
CONGRESSIONAL BUDGET OFFICE,
*Washington, DC, August 1, 1984.*

Hon. JAMES J. HOWARD,
*Chairman, Committee on Public Works and Transportation, House of Representatives, Rayburn House Office Building, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the attached cost estimate for H.R. 5607, a bill to authorize and direct the Librarian of Congress, subject to the supervision and authority of a Federal civilian or military agency, to proceed with the construction of the Library of Congress Mass Book Deacidification Facility, and for other purposes.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

ERIC HANUSHEK
(For Rudolph G. Penner).

### CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

1. Bill number: H.R. 5607.
2. Bill title: A bill to authorize and direct the Librarian of Congress, subject to the supervision and authority of a Federal civilian or military agency, to proceed with the construction of the Library of Congress Mass Book Deacidification Facility, and for other purposes.

3. Bill status: As ordered reported by the House Committee on Public Works and Transportation, July 31, 1984.

4. Bill purpose: The bill authorizes the Librarian of Congress to proceed with the construction of the Library of Congress Mass Book Deacidification Facility. It authorizes the appropriation of $11.5 million for this purpose.

5. Estimated cost to the Federal Government:

| | Millions |
|---|---|
| Authorization level: | |
| Fiscal year: | |
| 1985 | $11.5 |
| 1986 | ----- |
| 1987 | ----- |
| 1988 | ----- |
| 1989 | ----- |
| Estimated outlays: | |
| Fiscal year: | |
| 1985 | 1.1 |
| 1986 | 4.1 |
| 1987 | 6.3 |
| 1988 | ----- |
| 1989 | ----- |

The costs of this bill fall within budget function 800.

Basis of estimate: This estimate assumes the amount authorized will be appropriated by early in fiscal year 1985. Projected outlays are based on current plans of the Librarian of Congress.

6. Estimated cost to State and local governments: None.

7. Estimate comparison: None.

8. Previous CBO estimate: None.

9. Estimate prepared by: Mary Ann Curtin.

10. Estimate approved by: G. G. Nuckols (for James L. Blum, Assistant Director for Budget Analysis).

(4) With reference to clause 2(l)(3)(D) of Rule XI of the Rules of the House of Representatives, the Committee has not received a report from the Committee on Government Operations pertaining to the subject matter of this legislation.

(5) With reference to clause 2(l)(4) of Rule XI of the Rules of the House of Representatives, the following information is provided: The effect of carrying out H.R. 5607, as reported, should be negligible with respect to prices and costs.

## COST OF LEGISLATION

Clause 7(a) of Rule XIII of the Rules of the House of Representatives required a statement of the estimated cost to the United States which would be incurred in carrying out H.R. 5607, as reported, in fiscal year 1984, and each of the following 5 years. The Committee estimate of these costs in terms of authorization contained in the bill is $11.5 million. The Committee agrees with the estimates of outlays contained in the report of the Congressional Budget Office.

## COMMITTEE ACTION AND VOTE

The Committee, in compliance with Rule XI (2)(l)(2)(A) of the Rules of the House of Representatives, reports favorably the bill, H.R. 5607. The Committee ordered the bill reported by voice vote.

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